COUNTY OF SAN LUIS OBISPO

March 2002

2001 Water Quality Report
Lopez Recreation Area

To our customers

The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. We sincerely hope this report gives you the information you seek and have a right to know.

Photo by John Sutherland

What is the source of my drinking water?

Your water comes from two groundwater wells located within the Lopez Recreation Area. The water is cleaned through a natural filtration process as it trickles down through the ground. During this process, water may also pick up contaminants found in the soil, either natural or man-made. Groundwater is normally very clean and is simply disinfected with chlorine to help minimize viral and bacterial contamination.

How is the water system operated?

The Lopez Recreation Area water system is assigned one part-time water treatment operator. All operators who work for the County are certified by the California Department of Health Services (DHS). They are knowledgeable professionals dedicated to maintaining an excellent water system and providing you with the best quality water possible.

Where is the water tested?

Water sampling and analyses are performed by the San Luis Obispo County Water Quality Laboratory. The lab is certified by the DHS as an environmental testing laboratory for bacteriological and chemical analyses. Federal and State requirements dictate that all regulatory analyses be performed by certified labs following approved procedures.

Where can the community participate in decisions regarding water quality?

The San Luis Obispo County Board of Supervisors meets every Tuesday (except the 5th Tuesday in a month) in the board chambers located in the Government Center Annex (1050 Monterey Street, San Luis Obispo). The Board holds budget hearings during the month of June. Interested persons should check the Board's agendas for specific dates. Agendas for all Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the Board of Supervisors internet web site at http://www.co.slo.ca.us.

Is there a problem with the water quality?

The two production wells that provide drinking water to the Lopez Recreation Area have been determined at times to be "under the direct influence of surface water" by the DHS in accordance with the provisions of the Safe Drinking Water Act. While the water quality of these wells continues to meet all primary drinking water standards for public health and safety, there exists a potential for contamination of the well water by surface water. Accordingly, the Public Works Department is now engaged in a project to construct a new drinking water production well by the end of 2002. During the course of the construction project for the new well, on-going monitoring of the two existing wells will be continued to ensure that the drinking water from those wells continues to meet all health and safety requirements.

Este informe contiene informacíon muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

TERMS USED IN THIS REPORT:

Maximum Contaminant Level Goal (MCLG) and Public Health Goal (PHG) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the Federal Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Primary Drinking Water Standards (PDWS) – MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS) – MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.

No Standard (NS) - Contaminant for which there is no established MCL.

Not Detected (ND) - Contaminant is not detectable at testing limit.

LI - Langelier Index; Noncorrosive = Any positive value, Corrosive = Any negative value

NTU - Nephelometric Turbidity Unit

pCi/L - picoCuries per liter (a measure of radioactivity)

ppm - parts per million, or milligrams per liter (mg/L)

ppb - parts per billion, or micrograms per liter (µg/L)

TON - Threshold Odor Number

CU - Color Unit

micromhos/cm - micromhos per centimeter

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants* which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the DHS regulate the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

Tables 1,2,and 3 list all of the drinking water contaminants that were detected from January 2001 through December 2001, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The Department of Health Services requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

Table 1 – Detection of Contaminants with a Primary Drinking Water Standard			**Lopez Rec Wells**		
Contaminant (reporting units)	**MCL**	**PHG (MCLG)**	**Range**	**Average**	**Potential Source of Contamination**
Arsenic (ppb)	50	——-		2	Erosion of natural deposits; runoff from orchards
Fluoride (ppm)	2	1	0.42—0.45	0.44	Erosion of natural deposits
Gross Alpha particle activity (pCi/L)	15	——-	ND—9.17 (2000)	4.6	Erosion of natural deposits
Total Trihalomethanes (ppb)	100	——-	ND—0.7	0.4	By-product of drinking water chlorination

Table 2 – Detection of Contaminants with a Secondary Drinking Water Standard		**Lopez Rec Wells**		
Contaminant (reporting units)	**MCL**	**Range**	**Average**	**Potential Source of Contamination**
Chloride (ppm)	500	16—18	17	Runoff/leaching from natural deposits; seawater influence
Color (CU)	15	1—2	2	Naturally occurring organic materials
Corrosivity (LI)	Noncorrosive	-0.2—0.1	0.0	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Odor – Threshold (TON)	3		1.2	Naturally occurring organic materials
Specific Conductance (micromhos/cm)	1600	710—730	720	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	500		150	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1000	500—530	520	Runoff/leaching from natural deposits
Turbidity (NTU)	5	0.25—0.31	0.28	Soil runoff

Table 3 – Detection of Contaminants without a Drinking Water Standard	**Lopez Rec Wells**		
Contaminant (reporting units)	**Range**	**Average**	**Potential Source of Contamination**
Alkalinity as $CaCO_3$ (ppm)	260—270	270	Runoff/leaching from natural deposits; seawater influence
Calcium (ppm)	84—91	88	Runoff/leaching from natural deposits; seawater influence
Hardness (ppm)	340—360	350	Generally found in ground and surface water
Magnesium (ppm)	37—39	38	Runoff/leaching from natural deposits; seawater influence
pH	1.27—7.36	7.32	Runoff/leaching from natural deposits; seawater influence
Sodium (ppm)		29	Runoff/leaching from natural deposits; seawater influence

WATER CONSERVATION

Saving water in the campground helps keep the lake full.

Tips to save water,
Keep the lake clean and
Still have fun!

- Don't work at the faucet.
- Keep water at your campsite for washing hands and dishes.
- Keep a pot of clean water at your campsite for drinking, cooking and brushing teeth.
- Take short showers.
- Consider using a solar shower for a quick rinse after being on the lake.
- Fill water toys from a bucket.

By conserving water, you help to ensure an adequate supply for all lake users.

What's new in 2002?

The County will be installing a new production well, which will replace the two existing wells as the primary source of water for the park. This well will conform to current State standards. The County will also be replacing over 1,000 feet of water line over the existing creek crossing. The new water line will be a more secure aerial crossing. The project will cost between $250,000 and $300,000 and will be completed by the end of 2002. The County has applied for, and expects to receive, a State Revolving Fund loan for this project.

Additional General Information on Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline, 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDs or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/ Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline, 1-800-426-4791.

Additionally, the EPA Office of Ground Water and Drinking Water maintains a website with useful information on drinking water. The address is www.epa.gov/safewater/. Additional information can be obtained at the American Water Works Association's website at www.awwa.org, the DHS website at www.dhs.ca.gov/ps/ddwem/index.htm, or by calling John Beaton, Water Quality Manager, at 781-5111.

WE'RE ON THE WEB!
WWW.SLOCOWATERQUALITYLAB.ORG
